

Access to Microfinance & Improved Implementation of Policy Reform (AMIR Program)

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RFP PREPARATION, TRAINING AND REVIEW OF MIS SOFTWARE

Final Report

**Deliverable for SMI Component, Task No. 3.1.1
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This report was prepared by Hanz Verkoijen, in collaboration with Chemonics International Inc., prime contractor to the U.S. Agency for International Development for the AMIR Program in Jordan.

Introduction

This report reflects the final stage in the implementation of a suitable MIS system for the Jordan Micro-Credit Company, further on as JMCC and a subsidiary of the Noor Al Houssein Foundation and Ahli Microcredit Company, further on as AMC and a subsidiary of the Jordan National Bank.

- In the period February/March 1999, the information needs of the 2 organizations were analyzed. It was made clear that - in general - the information needs of an organization strongly depend on its development stage and they become more complex as the company grows. The main conclusion was that for the first 2 or 3 years a standard off the shelf loan tracking and accounting program would be suitable as a MIS for the 2 start-up organizations.
- In April/May 1999 an inventory was done by the consultant of available loan tracking and banking packages on the market and a recommendation was done for 4 alternative solutions (Cubis4, Loan Ledger+, Loan Performer and MicroBanker).
- During the period May 16 to June 3, 1999, the 2 MFI's decided to work with Loan Performer. A couple of modifications were required to customize the software. Also an evaluation was done of Micro 2000, a client-server solution for the needs of CHF.
- During the month of September the modifications were added to the Loan Performer package.
- During the current period (October/November 1999) the consultant was supposed to train both MFI's in Loan Performer and start with the implementation.

The consultant started his mission with a 5 days training program in Loan Performer for JMCC, AMC and JWDS. However, after a couple of days, it became clear that:

1. AMC absolutely wanted Arabised software and came back from the decision to work with Loan Performer. AMC wanted to work with Micro2000, which is produced by a local company.
2. USAID proposed to consultant to continue - even priorities - his work on a Request for Proposal - further on a RFP - in order to obtain a program that suits both JMCC and AMC (and others in or outside of Jordan).
 - Micro2000 is now available as a standalone product, a file-server solution and a client-server solution.
 - The Cooperative Housing Foundation, further on as CHF, has entered into a partnership with Bankware to market Micro2000, has paid back the development costs to USAID and is going to use Micro2000 in the 30 countries where CHF is working.

- If USAID buys licenses for Micro2000 for the Jordan MFI's, the accounting part will be developed free of charge and will be available soon.
- A Caribbean consultant, Patrice Baker, has evaluated Micro2000 and wrote a positive report.

Activities

The consultant has been asked to work on both lines: implementation of Loan Performer and develop the RFP (with priority for the last item).

The training was affected in a way by the changes in the work plan that attendance from AMC was marginal. JMCC and JWDS appreciated the training, not only because they were more interested in working with Loan Performer, but also it gave them an opportunity to reflect on the work they were doing/going to do and the problems and possibilities for an adequate administration. JMCC and JWDS came up with a list of modifications that they would need to be able to work with Loan Performer. See the annex for a report on the training.

The consultant has been working on an RFP during his February/March visit. This activity was stalled because an RFP was no longer necessary as the MFI's were opting for a standard off-the-shelf solution. As things changed again towards a tender, the consultant has been working again on this RFP. The difference now is that the RFP would not be for the development of a software package from scratch, but for a standard package that would have to be customised to suit the immediate needs of JMCC and AMC. See the result of this in the annex.

Together with the MIS-managers of JMCC and JWDS, a second MIS consultant from AMIR and the technical advisor of AMIR, the consultant evaluated Micro2000 in Aqaba. His main conclusion is that AMC is too optimistic if it thinks that Micro2000 can be implemented immediately. There are certain features which AMC needs that are not available in Micro2000. See the annex for further details and the reply from Bankware regarding the technical issues.

The result of the Aqaba visit was that neither JMCC nor JWDS choose for Micro2000. JMCC sticks with Loan Performer and JWDS wants to evaluate more packages before making a final decision.

Regarding modifications asked by JMCC, the consultant has added the following items to Loan Performer during his mission:

- Interest deducted at disbursement.
- Start-of-the-day module where current date is verified.
- Option to preview/print user-log file for a specified period
- Option to preview/print all loan ledger cards of a certain client of loans disbursed in a certain period.

Conclusion

This mission has been characterized by changes in the activities. Initially, activities had to be cancelled/slowed down because priority was to be given to develop an RFP. Then, towards the end of the mission, an RFP was no longer necessary.

Our initial target was that AMC and JMCC would have started working with Loan Performer by the end of this mission. Because of the changes, this target has not been achieved. AMC is going to test Micro2000 themselves and will come up with the specifications for change themselves before 16th of November 1999. Based on this Bankware will provide a pro-forma including license costs for AMC, modifications and 1 year support. JMCC still has to order Loan Performer, pending the modifications needed. AMIR will work on the waiver that is needed for the acquisition of Micro2000 for AMC.

Annexes:

Annex 1 : Report on Training in and Evaluation of Loan Performer

Annex 2 : Comments on Modifications Loan Performer wanted by JMCC

Annex 3 : Evaluation Micro2000

Annex 4 : Request for Proposal Documents

Annex 1: Report on Training in and Evaluation of Loan Performer

During the first week a 5-day training course was conducted in the use of Loan Performer for representatives of JMCC, AMC and JWDS.

Attendance:

The MIS persons of JMCC and JWDS have attended the full period and have submitted an evaluation report. The MIS person of AMC has attended only 3 days and did not submit an evaluation report. The Operations Manager and Accountant of JWDS attended 1 day training and 2 credit officers of AMC attended 2 days.

Evaluation:

The MIS manager of JMCC has submitted his impressions of Loan Performer. Apart from modifications here and there, his main conclusion is: Loan Performer is acceptable as long as JMCC is not the only organisation in Jordan using it.

The MIS manager of JWDS has submitted her impressions of Loan Performer. If JWDS is going to work with the program, some more modifications are needed. However JWDS is first going to evaluate an MIS system in Jordan and define the suitability of this system for them. It won't be until the end of this year before JWDS will take a decision.

AMC wants to work with Micro2000 in a client-server environment. AMC is ready to start operations and "just waits for the implementation of the MIS-system".

Consultant's Comments:

For JMCC Loan performer might be the best solution. Their worry of being the only organisation in Jordan working with the program should not be a decisive element in taking the program. If the degree of local support is less than what they want, JMCC should build support in-house. The consultant highly recommends that JMCC buys Visual Foxpro. JMCC is not the only "isolated" organisation that is using Loan Performer. A successful and sustainable implementation of Loan Performer can be done without local support, provided that Visual Foxpro knowledge is available in-house.

JWDS wants to evaluate another system first and Loan Performer still has to be evaluated by the JWDS Organisations Manager and the Account. We cannot rush anything and should let JWDS take their decision at their own pace.

The banking background of AMC makes it choose for Micro2000. It is the most expensive option, not only in license fees, but also in maintenance costs. However, the costs are still within the budget. What is more important is that the system has not been fully tested by AMC. The consultant has recommended that the MIS Manager joins him on his trip to CHF to test Micro2000, but for some reason this was not possible. If AMC has tested this program and finds it suitable, there should be no reason to prevent them from working with it.

Details of Modifications Wanted by JMCC:

1. JMCC wants interest to be deducted at disbursement. Initially this was not possible in Loan Performer. The consultant has added this feature in the last week of his mission.
2. The administration of penalties must be separated from the loans. If a client has a 10 JD penalty and a 100 JD due and pays 100 JD, Loan Performer should not take 10 JD for penalty repayment and 90 for due. The payment of penalties should be separated from the payment of dues.
Remark Consultant: AMC would do the administration the way Loan Performer does: first take the penalty, any remaining balance is payment for due installments.
3. The program should have a feature available to calculate penalties as a fixed amount per day, starting from a certain date with option to preview and correct amounts before they are saved.
4. The Loan Ledger Card should include penalties and should be in Arabic
5. A start of the day module should be added that:
 1. Allows for the entry of the current date and time
 2. Prints automatically a report on dues for the next day (tomorrow) with fields loan number, client number, payment number, payment account, accumulated penalties and a report on accumulated penalties up to the current date with fields loan number, client number, accumulated penalties
6. The following reports have to be available in Arabic: Repayment Schedule, Loan Ledger Card and Loan History Report
7. It should be made possible to print out all Loan Ledger Cards for a specific client for a specific period
8. Pre-payments should not change the due dates (Remark Consultant: JMCC is not going to accept pre-payments)
9. Interest may not appear on the Loan Ledger Card (for religious reasons)
10. Business sectors must have a unique ID code for reference purposes
11. The entry of disbursements should be available only for the accountant, not for the credit officers.
12. The entry of user passwords by the manager (System/Users) should be hidden
13. The number of decimals for amounts should be extended to 3 (now only 2)
14. The recalculation of dues at the moment of disbursement should get an option to recalculate dues starting from a user definable date, not from the disbursement date as is currently the case. JMCC prepares a check for the client the day after loan approval, but the client may not take the check until 1 day or maybe 1 week later. The due dates should not be recalculated as of the day that the check is taken by the client, but as of the day that the check was issued.
15. JMCC wants to pay for 2 concurrent users only, not for 5.

Details of Modifications Wanted by JWDS:

1. the entry of users should not close the window after addition/viewing/deleting users
2. the configuration should be read-only for all users, but updateable only for manager (now other users cannot even see the parameters)
3. in addition to loan officers, JWDS needs "credit agents". One loan officer can have several credit agents. Reports on credit agents should be made possible as well.
4. the loan officer should not be able to delete a loan or repayments, only managers may do this
5. a track record of deleted loans/repayments is needed
6. bug found adding new funding agencies as a loan officer (error 1925: unknown member)
7. like item 13 of JMCC
8. the number of characters for a Fund (15) is not enough
9. JWDS needs sub-sectors of business sectors. The sub-sectors are linked to the loans.
10. It should be possible to black-list a client for a certain period of time. In that period the client cannot receive a loan.
11. The group's members should be individual clients. The same client can have a loan as a group member or as an individual
12. The options in the loan menu are too many and have to be grouped into sub-menus
13. The fields for commission and development fee should not be read-only with entry of commissions
14. The interest with the loan application has to be added as belonging to the period, not the annual interest. E.g. if a loan has 8% interest over 18 weeks, you should be able to enter 8% instead of 23,??? on annual basis.
15. See item no. 3 of JMCC
16. The default loan amount under configuration should get an option to divide the loan amount to the group by all group members
17. If a group member is no longer member of a group, you should not be able to give him a loan
18. The next due date should be proposed as the default payment date for a repayment. At least this should be visible on the same page (not on the next page)
19. It takes too long to enter a repayment. The choice of client ID should be available from the same page as the repayment
20. A report on payments of written-off loans should be created.
21. The Loan Performer program is a "closed" system with no options to tailor it to JWDS needs. JWDS would like the Fox-Fire report generator to be called with all current reports, so that these can be modified. Also "hooks" could be created to startup modules that JWDS has created.
22. The different lines on the loan history page of the entry of repayments should get different colors to distinguish repayments from dues.

Annex 2: Comments on Modifications Loan Performer wanted by JMCC

1. JMCC wants interest to be deducted at disbursement. Initially this was not possible in Loan Performer.

Consultant: This has been added to the program.

2. The administration of penalties must be separated from the loans. If a client has a 10 JD penalty and a 100 JD due and pays 100 JD, Loan Performer should not take 10 JD for penalty repayment and 90 for due. The payment of penalties should be separated from the payment of dues.

Consultant: JMCC was not clear if this is what they want. Chito remarked that it is more common in micro-finance to accept penalties before dues. The consultant remarked that JMCC has 3 options: 1. Accept penalties before dues and no change is need in Loan Performer, 2. Treat penalties separately and have Loan Performer modified for this, or 3. Treat penalties separately and use Excel or another tool for the administration. The consultant awaits JMCC's response.

3. The program should have a feature available to calculate penalties as a fixed amount per day, starting from a certain date with option to preview and correct amounts before they are saved.

Consultant: This is pending the answer to point 2.

4. The Loan Ledger Card should include penalties and should be in Arabic

Consultant: This card shows penalties charged and penalties paid. The labels can be created in Arabic, for the data this is more difficult. JMCC will consult their lawyers about the possibility of working with loan contracts where the client agrees on an 'alias' name in English characters that will be used by the computer.

5. A start of the day module should be added that:

1. Allows for the entry of the current date and time
2. Prints automatically a report on dues for the next day (tomorrow) with fields loan number, client number, payment number, payment account, accumulated penalties and a report on accumulated penalties up to the current date with fields loan number, client number, accumulated penalties.

Consultant: the first point is okay and can be added. About the second point was discussion. It seems it might be better for loan officers to work with a weekly dues report. Currently this report cannot be printed per loan officer. The following options will be added:

1. Print this report for a specific loan officer, 2. Print this report with sub-totals per credit officer, 3. Print a report for each loan officer.

6. The following reports have to be available in Arabic: Repayment Schedule, Loan Ledger Card and Loan History Report.

Consultant: the labels can be created in Arabic, for data there are problems. See also point 4.

7. It should be made possible to print out all Loan Ledger Cards for a specific client for a specific period.

Consultant: this can be added.

8. Pre-payments should not change the due dates.

Consultant: as a policy JMCC is not going to accept pre-payments, but in case this can be changed.

9. Interest may not appear on the Loan Ledger Card (for religious reasons)

Consultant: this also can be changed.

10. Business sectors must have a unique ID code for reference purposes

Consultant: can be done, but is not essential.

11. The entry of disbursements should be available only for the accountant, not for the credit officers.

Consultant: this can be done.

12. The entry of user passwords by the manager (System/Users) should be hidden

Consultant: this can be done.

13. The number of decimals for amounts should be extended to 3 (now only 2).

Consultant: for the loan ledger this will probably not be a problem. It is more regarding Tax issues. If this is critical, it can be done.

14. The recalculation of dues at the moment of disbursement should get an option to recalculate dues starting from a user definable date, not from the disbursement date as is currently the case. JMCC prepares a check for the client the day after loan approval, but the client may not take the check until 1 day or maybe 1 week later. The due dates should not be recalculated as of the day that the check is taken by the client, but as of the day that the check was issued.

Consultant: this can be done. However, there isn't a problem if the date of issuing the check is entered as the disbursement date. This is the date on which the due dates depend and also the date on which the GL bookings are made. There is no extra entry into the program for the collection of the check.

15. JMCC wants to pay for 2 concurrent users only, not for 5.

Consultant: Crystal Clear Software Ltd. is of the opinion that the price of the product is already very low. Discounts can be made on the time that will be invested to do the

modifications, not in the costs of the licenses.

16. JMCC is reluctant considering support being difficult.

Consultant: JMCC will not be the only organisation that uses Loan Performer in a country other than Uganda. For the annual fees, JMCC gets regular updates with bug fixes and additional features. If JMCC finds bugs, they have to be reported to Crystal Clear Software Ltd. (there is a standard form in the Help system available). The bug will be fixed and CCS will create an update of the program and make available through its website. If problems occur regarding the database, the MIS person should be able to handle them. If not, CCS can give support by means of PC-Anywhere and telephone-by-internet. Also CCS expects to have a support person available in Cairo within 6 months.

Annex 3: Evaluation Micro2000

Introduction

On 27 and 28 October 99 CHF organised a demonstration of Micro2000, the micro-finance loan-tracking software of Bankware, for representatives of AMIR Project, JMCC and JWDS. AMC didn't think it necessary to attend the demonstration. The demonstration was held at the CHF Aqaba office where the program was operational since 3 months. It was the consultants task to verify whether there have been improvements regarding the findings of an earlier mission by the same consultant in May/June 99. As this was a demonstration for several people and also because Bankware is going to change the interface completely, the consultant didn't test the bugs found in May/June. This report just gives the broader picture.

Improvements

- the help function was now working, although not yet correctly (some screen items overwrote other items)
- a report on repayment rates per period was added (and probably other reports).
- loan approval and write off dates now require user input (in May/June this was still the system date of the computer)
- some reports have an option to print in detail or as a summary only.

Pending Items

- the mode of transactions is still not defined (whether cash, check or direct payment to bank account). This makes balancing with accounts difficult.
- no accounting module available.
- no user-definable fields available for clients or loans.
- with the entry of a repayment, principal is deducted first - first priority - then interest (it is common practice in micro-finance to book interest first, then principal).
- there is no time-limit to the addition of penalties to a defaulting loan.
- the entry of clients or loans goes by reference numbers. There is no immediate lookup-feature available.
- reports on portfolio at risk are still missing.
- repayment rates (and portfolio at risk) per business sector are still not available.
- a loan ledger card that is fully paid can not be viewed or printed anymore.
- the print-out language has to be defined at login. It is not possible to choose the language of a report at the point of report generation. The user has to quit the program and login with another language.

New Items

- the entry of a loan repayment schedule according to flat interest discounted (interest deducted at disbursement) is not possible.
- repayment periods of 14 days are not available (only half-monthly).
- a loan cannot have a grace period.

- although some reports have a grouping feature, most reports cannot be viewed/printed according to a user-definable order.
- the generation of reports is slow.
- reports take an enormous amount of paper. There has been no effort to make reporting efficient in this sense. E.g. every report has a list of selection criteria taking about 7 lines on each page, making the actual amount of information per page very limited.

Promises

As a follow-up of the review of Patrice Backer, the rather un-friendly interface will be replaced by a new, more user-friendly menu structure. According to CHF, Bankware will have this upgrade available within 1 month, as well as a demonstration version for potential clients. This new upgrade will include:

- an option to limit the addition of penalties to a certain period.
- the user can set a certain number of days after the due date as a kind of grace period in which the client can pay the due installment without the computer calculating penalties.
- the order of priorities regarding payment of penalties, interest and principal with regard to a loan repayment, will be user-definable.
- the entry of loan application fees will be available in the new update.
- the definition of non-working days will be available in the new update.
- the new version will support the entry of a grace period for loans.
- the upgrade will have the possibility to reschedule loans.
- the upgrade will have a feature called 'rounding' to round amounts to a certain number of decimals.

Other Issues

- Bankware still has no price tag for its product.
- Though a report generator can be provided, Bankware doesn't provide a document of the database structure. This makes the creation of user-definable reports very difficult.
- Only 6 out of 29 reports have been verified so far to be accurate.

Conclusion

The consultant is of the opinion that in potential Micro2000 can be a good product for micro-finance, but at this moment the program is still not ready for installation at micro-finance institutions. E.g. both JMCC and AMC want to use flat rate discounted as the standard repayment schedule, which is not available in Micro2000. The same with regard to a repayment period of 14 days, which also is not available. Like these, there are just too many promises that still need to be realised.

JMCC - after seeing the demonstration - seems to stick with Loan Performer. It prefers the integration with accounts over the Arabisation.

AMC - considering the conclusion above - is just too optimistic when it thinks that Micro2000 can be ordered today and be operational tomorrow. If - after this report - AMC still wants to

work with Micro2000, it should wait for the demonstration version and test it sufficiently. In the mean time, like JMCC, it can administer their loans in an Excel spreadsheet.

Annex 4:

Request for Proposal Documents

Invitation for Bids

MIS for Micro-Finance

AMIR Project October 1999

1.0 Introduction

1. AMIR requests proposals from software firms for the implementation of a Micro-Finance Management Information System at one or more local Micro Finance Institutions.
2. The MIS system should satisfy the information needs of these organizations for the next 5 years.
3. The following goods and services are requested from the bidders:
 - the supply and installation of a standard, off-the-shelf loan tracking and accounting program
 - training of users
 - after sales support
4. If customization of the software is needed, it should not exceed 50 man-days.
5. All documents related to this tender should be in English and all costs should be expressed in US Dollars.
6. Firms are allowed to associate to better qualify for the tender. One of the firms has to be designated as the lead firm that will be in charge of the whole project and be responsible for its execution.

2.0 Submission and Opening

1. The software firm shall submit one original technical proposal and one original financial proposal along with 2 copies of each.
2. The completed technical and financial proposals are to be delivered/faxed/email by 1999 to Fax Email Bids received after this date shall be rejected and returned to the bidder.
3. All inquiries with respect to this RFP are to be addressed to
4. The proposals shall be valid for a period of ninety (90) days starting from the date of their submission.

3.0 The Proposals

The bidding firms are to supply the following documents:

- A. documentation indicating the firm's qualifications, competence and experience,
- B. technical proposal,
- C. financial proposal.

A) Docs regarding the firm's qualifications, competence and experience

This should contain a profile of the firm, its organisation, including CV's of staff and an outline of recent experiences on assignments of a similar nature. For each assignment, the outline should indicate the customer's name, location, a brief description of the contract, the profiles of the staff provided, duration, contract amount and firm involvement.

B) The Technical Proposal

The technical proposal for the software has to be a separate document, containing:

1. Any comments or suggestions, concerning the bidding document and a description of the methodology (work-plan) that the firm proposes to execute.
2. The composition of the proposed staff team (CV included) and the tasks that would be assigned to each.
3. Estimates of the total time effort (person x man-days) to be provided to carry out the assignment.
4. The minimum and recommended hardware requirements to operate this software.
5. The firm's comments, if any, on the data, services and facilities to be provided by AMIR or its subsidiaries and indicated in the bidding document.
6. Information regarding warranty, maintenance and after sales support. The bidding firm should have - or be willing to open - an office in Amman from where support and maintenance can be provided. After sales support should indicate how many - if any - man-days are included for add-hoc modifications of the program and what the firm will charge if requirements exceed this minimum.

C) The Financial Proposal

A financial proposal has to be submitted with the following specifications:

1. all features should be listed with their man-days and price as detailed as possible
2. the costs should include the supply of any technical documentation
3. all other system software (operating system, databases, licenses) necessary for the implementation of the proposed MIS should be specified with their respective costs.

4. terms for support and maintenance should be detailed, including any additional hard- and software.
5. Except for the item raised under the next point, the bidder must not expect any payments in addition to the total costs specified in the financial proposal as related to installation, training, documentation and customisation. Therefor the bidder may include a specified number of man-days for customisation as part of the proposal.
6. At this point AMIR is not certain about how many licenses are needed in future. The bid should therefor be based on implementation on a single site with specified charges for additional sites.
7. AMIR will charge the bidder a penalty of USD 200 for every week that the deadlines - as specified in the contract - are not met. This is not negotiable.

4.0 Evaluation

1. The evaluation will be carried out by an evaluation committee. The committee will assign points for different aspects of the firm and their proposals. The firm gaining the most points will win the tender.
2. The following are the criteria on which firms/proposals will be evaluated and the maximum number of points to be earned:
3. Qualifications, competence and experience of the firm for the assignment: 30 points
More specific:
Number of years in business developing (micro-)finance software: 15 points
Number of sites installed base: 15 points
4. Adequacy of the technical proposal: 50 points
More specific:
Availability of minimum requirements in product: 30 points
Period needed for customisation to meet minimum requirements: 10 points
Availability of non-minimum requirements in product: 10 points
5. Adequacy of the financial proposal: 20 points
More specific:
Costs for licenses, customisation, additional costs hard-/software: 15 points
Maintenance and support costs: 05 points

5.0 Negotiations

1. Prior to the expiration of the validity of the proposal, AMIR shall notify the successful firm that submitted the highest scoring proposal in writing and invite it to negotiate the contract. AMIR reserves the right to invite the second ranking firm for parallel negotiations.
2. Negotiations normally take from seven to fourteen days. The aim is to reach agreement on the terms and conditions under which the MIS system will be procured and paid for, and initialise a draft contract by the conclusion of negotiations.
3. Negotiations shall commence with a discussion of the software development technical proposal, the proposed methodology (work-plan), staffing and any suggestions made to improve the bidding documents. Agreement shall then reach on the final documents, the staffing, activities, responsibilities, deadlines, budgets and reporting.
4. Changes agreed upon shall then be reflected in the financial proposal.
5. The negotiations shall be concluded with a review of the draft form of the contract. AMIR and the selected firm shall finalise the contract to conclude negotiations. If negotiations fail, AMIR shall invite the firm that received the second highest score to contract negotiations.

6.0 Award of Contract

1. The contract shall be awarded after successful negotiations with the winning firm. Upon completion of negotiations and signing of the contract(s) with the winning firm, AMIR shall inform the other firms that their proposals have not been selected.
2. The selected firm is expected to commence the assignment immediately upon the signature of the contract.

7.0 Software Specs

AMIR requests the implementation of an MIS system for two micro-finance organisations, both located in Amman, Jordan. More specifically this means the acquisition, implementation, training in and support for an off-the-shelf, integrated loan tracking and accounting package. Items that are minimum requirements are high-lighted.

General System Items

- The MIS should be operational on standalone computers as well as in a network environment (LAN or WAN). It should preferably be scalable, offering solutions for file-server and client - server environment (the last only required by AMC).
- The system should be an on-line, real-time system, where entries immediately update the database.
- Minimum required capacities:
 - 100 users
 - 1,000,000 clients
 - 1,000,000 loans
 - 1,000,000 accounts transactions annually
 - 99 account ledgers
- The MIS system should be a multi-user system where: user groups can be defined with their (menu) access rights (read and/or write). Ability to add, remove, suspend users, add or change user passwords, force users to change their passwords every X days, automatic log off after a pre-set period of inactivity.
- The software must have a facility to enter non-working days. All dates must be verified not to fall on one of these days.
- The system should be able to work with flexible data sets in different locations.
- Branch offices should have full access to the MIS system even if it's off-line. AMC wants the entries to be updated to the Head Office database automatically once the connection is up again.
- Head Office should have full access to the corporate database.
- Data should be encrypted or otherwise protected to prevent unauthorised access.
- The system should have integrated measures to protect the database against corruption and garbage (ANSI codes up to value 32)
- The system must have an audit trail. Printing of the audit trail should be possible for a certain period and for a certain user.
- The software must be bi-lingual (English and Arabic). It should be possible to log in in English and print reports in Arabic or vice-versa.
- Possibility to send reports to printer, screen (pre-view) or file.
The print to file option should give a choice of different formats (at least Excel, Lotus, Dbase, Ascii, Word and Wordperfect).
- A report generator should be included.
- A facility should be available to (de-)archive old data.

- All amounts should have at least 2 and preferably 3 decimals. AMC says 2 is not acceptable.
- Percentages should have 2 decimals
- The software should have passed the 'Designed for Windows NT and Windows 98 Logo Test'.
- On-line Help available (with Context, Index and Find) and context sensitive help on forms, sufficient to assist in the operation of the system for a user in the organisation already familiar with the business operations.
- On-Line education: every time a user logs in, a tip should be given on how to improve the use of the program. Ability to switch this feature on or off.
- A backup/restore facility should be part of the program.
- Technical documentation with listing of files and file-structure (data-dictionary) and installation guide lines (audience: system administrator)
- Year 2000 Compatible (of course)

Broad Functions of the System

The system should have the following modules:

Customer Information

- Information on individuals, businesses and groups

Loan Tracking

- Ability to define loan products (see below)
- Suitable for individual lending and group lending methodologies
- Loan Application
- Loan Approval
- Loan Disbursement
- Loan Repayments
- Write Off Loans
- Re-schedule Loans
- Automatic calculation of incentives for loan officers and supervisors

Accounting

- General Ledger
- Budgeting
- Loan Tracking as sub-ledger of accounts

7.1 Customer Information

Information regarding individuals should contain at least:

Client Number

Name

Name of husband/wife/partner
Identity Card Number
Date of Birth and Birthplace
Nationality
Branch
Phone
Mail address and Town
Physical Address and Town
Date of first registration
Gender
Literate
Marital status
Number of Children
Number of Dependants
Father's Name
Grand-Father's Name
Educational Degree
Occupation
Employed By
Employer's Address
Employer's Phone
Employed Since
Main source of income
Amount of main source of income (net income)
Secondary source of income
Amount of secondary source of income (net income)
Amount of other family income
Year of Income Data
3 User-definable fields
(External) Bank, Branch and Savings Account Number (used to deposit check for disbursement)

Information on groups should contain at least:

Client Number
Name of the group
Date of creation
Branch
Mail address and Town
Physical Address and Town
Date of first registration
Contact Person
Phone
Name of the chair-person

Identity Card Number chair person
Name of the secretary
Identity Card Number secretary
Name of the treasurer
Identity Card Number treasurer
Name of another board member
Identity Card Number other board member
3 User-definable fields
(External) Bank and Savings Account (used to deposit check for disbursement)
Group Members
Name
Identity Card Number
Client Number within the group
Start Membership
Gender
End Membership
3 User-definable fields

Client Contact

Date
Client
Officer (client had contact with which officer)
Contents (of the last contact)

Project

Client
Name Project
Mail address and Town
Physical Address and Town
Phone
Year Established
Ownership (private, family, company)
Judicial Form
License
Business Sector

Project-Growth

Project
Year of Financial Data
Assets
Liabilities
Capital
Annual Sales

Employees (part-/full-time, family/non-family)
Profit/Loss

7.2 Loan Tracking

Loans should be tracked by: branch, client, loan officer, loan supervisor, loan fund, area, business sector and loan product. One loan supervisor can supervise 1 or more loan officers. Clients can be individual clients or group members.

Loan Products

The system must be able to define at least 5 different loan products.

Elements that form part of the loan product are:

- The name of the product
- Whether personal loan or group loan or applicable for both categories
- Loan Fund
- Annual interest rate
- Interest calculation method (flat rate discounted, add on or declining balance)¹
- Number of days per year for which interest is calculated
- Loan amount
- Processing fee (flat rate or as a percentage of loan amount or combination, for every application or for approved loans only)
- Grace period (in days)
- Number of installments
- Installment period (weekly, bi-weekly, half-monthly, monthly, quarterly, semi-annually, end of term lump sum)
- Pre-payments (not) allowed (though pre-termination should always be possible)
- Printing of notification letters
- Penalty charges for loans in arrears (as a percentage on past due or as a flat amount per day)

Loan Application

In addition to the loan product, the loan application should include application date, client, project, loan fund, loan amount, loan guarantors, collateral, responsible loan officer and responsible field officer (not for AMC), debt service ratio and 3 user-definable fields. The loan amount must be validated according to a validation table whereby the loan size depends on the successful termination of earlier loans. There is a ceiling for every loan cycle.

After the entry of a loan application, the computer should generate a loan repayment schedule report for the client. In case of group loans, the loan amount should be split into the parts that each group member will receive.

The software should offer possibilities to correct loans not yet approved.

¹ Flat Rate Discounted: total interest = loan amount x annual interest x loan period in days / 360 or 365. The interest is deducted from the loan amount at the time of disbursement

Add On: total interest is the same as above, but is paid in equal parts with every instalment due

Declining Balance: interest is paid with every instalment according to the formula: balance of principal outstanding x interest x instalment period in days / 360 or 365.

Loan Approval

Loans can be approved or rejected. The application should record the date of approval/rejection and the reason for rejection.

The software should offer possibilities to correct loan approvals.

Loan Disbursement

The software should provide for disbursements by cash, check and transfer from bank account MFI to bank account client, in parts and for the full loan amount.

The software should allow for corrections on disbursement.

Loan Repayments

The software should be able to register payments in cash, by check and directly from the client to the bank account of the MFI. Special fields in the database must capture the interest and principal part of the repayment as well as the pre-paid, due and past-due parts of interest and principal.

The software should offer possibilities to correct wrong entries.

Reminder Letter

The software should give the possibility to print 5 different letters, of which 1 is to be printed x days before the maturity date and the others a flexible period after a default. The following letters are needed:

1. Reminder Notice for Maturing Loans (15 days before active loans mature)
2. Reminder for Past-Due Installment (for arrears 1 day late)
3. Demand Notice (for arrears 5 days late and every week after until 90 days)
4. Warning Notice

The format of the letters should be user-definable as well as the period when the letter should be printed. A report should be available on who received when which letter.

Penalties

The software should give the possibility to add penalties for loans in arrears either manual or automatic. Penalties will be added with loan number, date, amount and reason for the penalty. AMC calculates penalties as 1 month of interest. AMC wants the penalty to be calculated and added to the loan account by the computer. The penalty is the first thing the client pays (before any principal or interest due).

JMCC wants penalties to be added as a fixed amount per day. The recovery of dues does not depend on outstanding penalties. The administration of penalties should be separate from the loan administration.

The software should offer possibilities to correct wrong entries for penalties.

Write Off

An option to write off automatically loans in arrears of more than a certain period is not necessary (AMC). The write-off of a loan should be approved by the Board and therefore cannot be automatic.

A report on the loans written off has to be produced by the system.

The software should allow for corrections of written off loans.

Staff Incentives

The system must be able to calculate incentives for loan officers and for supervisors. For both the incentive is calculated as a mixture of the size of the portfolio - in number of outstanding loans - and the repayment rate. The number of outstanding loans determines a monthly bonus. The repayment rate determines the factor with which this bonus is multiplied. The salary equals the basic salary plus this incentive.

The software must be able to define at least 10 scales of active loans and 10 scales of repayment rates.

The method of calculating incentives for loan officers and supervisors are equal, except that the number of loans per supervisor is the average of the loan officer that he supervises.

At the end of the month the computer can calculate the benefits - if any - for the loan officers and the supervisor and print the gross salary including incentives. There is no need for a computerised salary administration.

Loan Rescheduling

There are actually 2 forms of 'rescheduling', the first being an extension of a particular installment, the second is the rescheduling of the loan balance over additional installments. The last option should be possible in the sense that extra installments can be added to a loan. The outstanding principal, (additional) interest and penalties will have to be repartitioned. Additional interest will be charged according to the period of the loan. The software should provide for both options.

If the program doesn't offer the flexibility needed, AMC will pay off the loan with the disbursement of a second loan for the defaulting client.

7.3 Accounting

Account Structure and Chart of Accounts

The accounting structure should be flexible. It should be possible to define the following structure: ABBB-CC-DD, whereby

- A indicates the account class (1: assets, 2: liabilities, 3: equity, 4: income, 5: expense)
- BBB indicates an account serial number (this can be extended with more digits)
- CC indicates a branch code
- DD indicates a funding agency (not needed by AMC)

Budgeting

Budgets should be maintained per account and per month. The entry of budgets should allow for 2 years of data.

Automatic Bookings

The following entries in the loan module will lead to the following automatic bookings:

Loan Application and Approval: no bookings

Loan Disbursement:

Principal Outstanding Individuals/Groups	Debit	
-/- Cash in Hand/ Checks/Bank		Credit

In case of flat rate discounted, the booking is a bit different:

Principal Outstanding Individuals/Groups	Debit	
-/- Cash in Hand/ Checks/Bank		Credit
-/- Interest Collected in Advance Individuals/Groups (Balance)	Credit	

and on the dates that the installments fall due:

Interest Collected in Advance Individuals/Groups (Balance)	Debit	
-/- Interest Earned on Individual/Group Loans (P&L)		Credit

for the nth part of the total interest, where n is the number of installments.

The last part of the booking may not depend on the system date of the computer. It needs the accountant to run a menu option to calculate and add Interest Earned for the last month. The month closure shouldn't be possible without having run this module.

Payment of Loan Commissions and Stationary:

Cash in Hand	Debit	
-/- Loan Commission		Credit
-/- Sale of Stationary		Credit

Loan repayments:

Payments can be made in cash or check at the branch or to an external bank account.

Cash in Hand/Checks/Bank	Debit	
-/- Principal Outstanding Individuals/Groups	Credit	
-/- Interest Earned on Individual/Group Loans (P&L)	Credit	

Note: the booking of the interest does not take place if the interest is paid up-front (Flat Rate Discounted).

On **check clearing** of a loan repayment:

Bank Account Revolving Fund	Debit	
-/- Checks		Credit

On entry of a **bounced check** for a loan repayment:

Principal Outstanding Ind/Grps	Debit	
Interest Earned on Ind/Grp Loans	Debit	
-/- Checks		Credit

Adding penalties for defaulters: No booking, penalties are booked when received.

Creation of the loan loss provision:

Provision Costs Bad Loans Individuals/Groups (P&L)	Debit	
-/- Provision for Bad Loans Individuals/Groups (Balance)		Credit

Writing off a loan:

Provision for Bad Loans Individuals/Groups	Debit	
-/- Principal Outstanding Individuals/Groups		Credit

Repayment of a written off loan:

Cash in Hand/Checks	Debit	
-/- Recovery of Written Off Loans (P&L)		Credit

Note: there is no provision for the interest as it is either received at the moment of disbursement or booked on cash basis (when actually received).

The booked transactions are stored in a batch. Corrections can be made until the batch is processed at the end of the day and a transaction report is printed. If the printout is correct (user input needed), the batch should be emptied.

Balance Sheet

The items of the balance sheet should be user definable according to a range of accounts. The main headers (Assets, Liabilities, etc.) are defined by the first account digit (1 = assets, etc.).

Monthly Progress Report

Last period This Period

Deviation (%)

1. LOAN ACTIVITY

No. of Branches served

No. of Clients w/Outstanding Loans

No. of Clients Served (New)

Total Releases

Total Due

Total Collection

Past Due

Total Loans Outstanding

Portfolio at Risk (loan balance with past due amounts)

Total loans past due installments & past due maturity

Savings Mobilized

No. of Active Women Borrowers

% of Women Active Borrowers total portfolio

No. of Active Borrowers outside Amman

% of Active Borrowers outside Amman to total portfolio

2. FINANCIAL HIGHLIGHTS

Gross Income

Total Expenses

Net Income before Tax

Cost per JD Loan

Total Assets

Total Capital/Fund Balance

Working Capital

Net Income

Before grants

After grants

% of net income over gross income

3. RATIOS

Cost Efficiency Ratio

Operating Self Sufficiency Ratio

Financial Sustainability Ratio

Current Ratio

Debt Ratio

Collection Rate

Past Due Rate

Loans per LO
Loan Loss Rate